and an outer parity of f bytes to an error correction block having a size of n bytes in a row

direction x m bytes in a column direction, the error correction method comprising:

obtaining a plurality of inner parity blocks (PI blocks) by segmenting the error correction

block in an inner parity (PI) direction into x segments, wherein x is an integer equal to or greater

than 2;

generating e-byte PI for each of the plurality of PI blocks generated by segmenting, and

adding the PIs in the PI direction; and

generating f-byte outer parity (PO) in a PO direction of the error correction block having

PIs, and adding the POs in the PO direction,

wherein a burst error is corrected in an HD-DVD.

15. (TWICE AMENDED) The error correction method of claim 4, wherein n x m is a

basic address unit recorded on the HD-DVD, the method further comprising:

dividing the error correction block into a plurality of data frames, each of the data frames

comprising a 4-byte ID, a 2-byte IED, an 18-byte RSV, two 2-KB user data blocks, and

two 4-byte EDCs.

19. (ONCE AMENDED) An error correction method directed to an error correction

block having data an inner parity direction and an outer parity direction, comprising:

segmenting the error correction block in the inner parity direction to form a plurality of

inner parity segments.

28. (ONCE AMENDED) The error correction method of claim 27, wherein the

interleaving of the data comprises interleaving a quantity of the data in relation to the size of a

burst error.

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29.    (TWICE AMENDED) A high density digital versatile disk (HD-DVD) disk comprising:

an error correction block structure encoded on the optical disk to correct a burst error in the HD-DVD, comprising:

a plurality of inner parity blocks, each said inner parity block comprising an e-byte inner parity in an inner parity direction; and

a plurality of f-byte outer parities in an outer parity direction.

Please **ADD** new claims 35-39 as follows:

35.    (NEW) An error correction method adding an inner parity of e bytes and an outer parity of f bytes to an error correction block having a size of n bytes in a row direction x m bytes in a column direction, the error correction method comprising:

obtaining a plurality of inner parity blocks (PI blocks) by segmenting the error correction block in an inner parity (PI) direction into x segments, wherein x is an integer equal to or greater than 2;

generating e-byte PI for each of the plurality of PI blocks generated by segmenting, and adding the PIs in the PI direction;

generating f-byte outer parity (PO) in a PO direction of the error correction block having PIs, and adding the POs in the PO direction; and

interleaving a plurality of data groups and the plurality of PIs in the PI direction in the error correction blocks having PIs and POs,

wherein the interleaving further comprises reallocating a plurality of PIs (PI0, PI1, ..., PIn/x) by gathering bytes having a same order in bytes included in each of the plurality of PIs,

thereby forming reallocated PI groups.

36.     (NEW) The error correction method of claim 35, wherein the reallocating is performed in the PIs in a single data row.

37.     (NEW) The error correction method of claim 35, further comprising:

moving and allocating the reallocated PIs between the reallocated PIs groups.

38.     (NEW) The error correction method of claim 36, further comprising:

interleaving the POs in the PO direction.

39.     (NEW) The error correction method of claim 38, wherein the PO direction interleaving further comprises:

obtaining an n x f byte bit stream by lining up the f-byte POs sequentially, and forming a divided PO by dividing the bit stream into each $\{(n \times f)/m\}$; and

moving and allocating the divided PO in the PO direction in each row.

## REMARKS

### INTRODUCTION:

In accordance with the foregoing, claims 32 and 33 have been cancelled without prejudice or disclaimer and claims 1, 15, 19, 28 and 29 have been amended. New claims 35-39 have been added. Claims 1-31 and 34-39 are pending and under consideration. Claims 10-14 are deemed allowable if rewritten in independent form.